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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,890	03/27/2000	Pankaj K. Jha	0325.00346	3976
21363	7590	10/14/2004	EXAMINER	
CHRISTOPHER P. MAIORANA, P.C. 24840 HARPER ST. CLAIR SHORES, MI 48080			GEORGE, KEITH M	
			ART UNIT	PAPER NUMBER
			2663	

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/535,890	JHA, PANKAJ K.	
Examiner	Art Unit		
Keith M. George	2663		

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 14 July 2004.

2a)  This action is **FINAL**.                    2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-3,5-10 and 13-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1,3,5-8,10 and 13-23 is/are rejected.

7)  Claim(s) 2 and 9 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 14 October 2003 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. In view of the Appeal Brief filed on 14 July 2004, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 13-19 and 23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the

claimed invention. There does not appear to be any support in the specification for two or more channels separated by at least one channel that appears in lines 8-10 of claim 13.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3, 5-8, 10 and 20-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Russell et al., U.S. Patent 6,584,118, hereinafter Russell, in view of Kivi-Mannila et al., U.S. Patent 5,539,750, hereinafter Kivi-Mannila.

6. Referring to claims 1 and 20, Russell teaches payload mapping in synchronous networks including in figure 5 the SDH multiplexing structure according to ITU-T recommendation G.70X. A set of STM frames (configured to generate a frame transmitted on a network) are assembled to contain a plurality of virtual containers (channel) (frame configured to store data in a plurality of channels) which are carried as an STM-N payload as illustrated in figure 6 (column 7, line 64 - column 8, line 2). Russell goes on to teach that an Ethernet frame (data packet) is interleaved between two VC3 frames (channels configured to store fragments of one or more data packets) (column 11, lines 52-53). Russell teaches all of the above with the possible exception that a single STM-N frame can be configured to store a plurality of channels. Kivi-Mannila teaches a method for receiving a signal used in a synchronous digital telecommunication system including in figure 3 the same SDH multiplexing structure taught by

Russell. Kivi-Mannila teaches in reference to figure 3 and figure 2 which illustrates a single STM-1 frame that the STM-1 transfer frame may contain three AU-3 units, each containing a corresponding virtual container VC-3 (column 1, lines 56-58). At the time the invention was made, it would have been obvious to a person of ordinary skill in the art that the teachings of Kivi-Mannila would allow a single STM-N frame of Russell to contain three virtual container (channels), each channel carrying a fragment of an Ethernet frame (data packet). One of ordinary skill in the art would have been motivated to use the teaching of Kivi-Mannila with the teachings of Russell because both teach details related to the STM-N frame using identical terminology and figures.

7. Referring to claim 3, Russell and Kivi-Mannila teach the apparatus described in reference to claim 1 above and Russell also teaches in figure 2 a section of a synchronous digital hierarch network comprising an STM-fiber ring (column 5, lines 9-11).

8. Referring to claims 5-7, 21 and 22, Russell and Kivi-Mannila teach the apparatus described in reference to claim 1 above and Russell also teaches in figure 9 that the VC3 (channel within the frame) payload comprises a plurality of Ethernet data frames (fragments of data packets) which are identified by means of pointers (offset locators configured to point to a next fragment). 18 pointers each of 16 bits are provided at the end of the VC3 payload after the user data portion (one or more header locations configured to identify the next fragment). Russell also teaches that the pointers point to the positions of the starts and ends of one or a plurality of Ethernet data frames within the user data portion (identify an end of one or more data packets) (column 9, lines 55-66).

9. Referring to claim 8, Russell and Kivi-Mannila teach the apparatus described in reference to claim 1 above and Russell also teaches that a VC3 payload comprise 6040 bits, occupying a duration of 125  $\mu$ s (fixed bandwidth channel) (column 11, lines 44-46).

10. Referring to claim 10, Russell and Kivi-Mannila teach the apparatus described in reference to claim 1 above and where Russell has clearly taught that the data packet is an Ethernet packet (Internet Protocol packets).

***Allowable Subject Matter***

11. Claims 2, 9 and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

12. Applicant's arguments with respect to claims 1, 3, 5-8, 10 and 20-22 have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant's arguments with respect to claims 13-19 have been fully considered but they are not persuasive. On page 6 of the appeal, applicant argues that figure 12 and the application on page 27, lines 2-3 supports the limitation of claim 13 directed to storing one or more data packets in a plurality of channels wherein the two or more channels are separated by at least one channel. Applicant argues that figure 12 shows a fragmented payload 212 spanning three fixed bandwidth channels with fragments in the first and third channel separated by the second channel. In response, this description of figure 12 appears to be new matter without support in

the specification. If it is supported by the specification, it does not appear to be supported on page 27, lines 2-3 as suggested by the applicant. Figure 12 also does not support the description supplied by the applicant in the appeal. Applicant claims that reference number 212 indicates a fragmented payload. In figure 12, reference sign 212 points to a solid block contained within what might be referred to as a fixed bandwidth channel, however the fixed bandwidth channel label does not point to the slot that reference sign 212 is contained in. Reference sign 212 clearly points to a single block and in no way could be understood to be a fragmented payload spanning three fixed bandwidth channels as argued by the applicant. Even if the second solid block was argued to be a second fragment of payload 212, which the examiner does not agree with, the payload 212 would then span five fixed bandwidth channels with fragments in the first and fifth channel separated by three other fixed bandwidth channels. The explanation provided by the applicant does not relate to figure 12. Claims 14-19 and 23 are similarly rejected. For these reasons and those stated in previous office actions, the 35 U.S.C. 112, first paragraph rejections are maintained.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith M. George whose telephone number is 571-272-3099. The examiner can normally be reached on M-Th 7:00-4:30, alternate F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau T. Nguyen can be reached on 571-272-3126. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Keith M. George  
4 October 2004



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